

## II. Claims

### **1-16 Cancelled**

**17. (New)** A method of increasing the adherence of non-hardenable coating materials on ferrous materials comprising contacting the ferrous material with an aqueous mixture of the non-hardenable coating materials and a material which hardens in the presence of water thereby forming a coating film on the ferrous material surface.

**18. (New)** The method of claim 1, wherein the material used to harden the coating film is selected from the group consisting of Portland cements, pozzolanic cements, aluminous cements and mixtures thereof.

**19. (New)** The method of claim 2 wherein the cements have particle size distribution between 0.01 micrometer and 100 micrometers.

**20. (New)** The method of claim 2 wherein the weight ratio of cement to ferrous material is between 1 to 40 and 1 to 5.

**21. (New)** The method of claim 1, wherein the non-hardenable material used to coat the ferrous material surface is selected from the group consisting of bentonite clays, bauxite, aluminum containing clay and mixtures thereof.

**22. (New)** The method of claim 21 wherein the non-hardenable material has particle size distribution between 0.01micrometer and 500 micrometers.

**23. (New)** The method of claim 21 wherein the non-hardenable material has particle size distribution between 0.05 micrometer and 100 micrometers.

**24. (New)** The method of claim 21 wherein the non-hardenable material ranges from 0.01% by weight to approximately 2% by weight in relation to the dry weight of the ferrous material to be coated.

**25. (New)** The method of claim 1, wherein the ferrous material is pellet, briquette, sized or fine ore.

**26. (New)** The method of claim 1, wherein the sum of hardenable plus non-hardenable material in the water dispersion ranges from 1 to 80% by weight of the dispersion.

**27. (New)** The method of claim1, wherein the contacting is by means of dipping, spraying or sprinkling.

**28. (New)** The method of claim 1, wherein the coat film hardening is achieved by the cure reaction of cement in air.

**29. (New)** In a method of reducing the formation of agglomerates of ferrous materials during reduction of such materials by coating the ferrous materials with an aqueous dispersion of a non-hardenable coating, the improvement comprising concurrently coating the ferrous material with a material which hardens in the presence of water.

**30. (New)** A coated ferrous material with significantly lower agglomeration formation during reduction produced by the process of claim 1.

**31. (New)** A coated ferrous material with low agglomeration formation during reduction as compared to uncoated ferrous material where the coating comprises a mixture of a non-hardenable coating material and a hardened coating material.

**32. (New)** The ferrous material of claim 31 where the non-hardenable coating material is selected from the group consisting of bentonite clays, bauxite, aluminum containing clay and mixtures thereof and a hardened coating material is selected from the group consisting of Portland cements, pozzolanic cements, aluminous cements and mixtures thereof.

**33. (New)** The ferrous material of claim 31 where the non-hardenable coating material is selected from the group consisting of bentonite clays, bauxite, aluminum containing clay and mixtures thereof and a hardened coating material is selected from the group consisting of Portland cements, pozzolanic cements, aluminous cements and mixtures thereof.